DESCRIPTIONS OF NEW AMERICAN AND CHINESE SPIDERS, WITH NOTES ON OTHER CHINESE SPECIES.

By RALPH V. CHAMBERLIN,

Of the Museum of Comparative Zoology, Cambridge, Massachusetts.

In this paper are described a number of new species of spiders recently noted by the author while identifying material in the United States National Museum and in the Museum of Comparative Zoology, and notes are given upon a collection from China belonging to the former institution. This collection was made by Mr. N. Gist Gee, chiefly in the Province of Fokien at Foochau, Kuliang, Kucheng, and Kushan, and in the Province of Kiangsu at Nanking and Soochow, the greater number coming from the latter place. The new Chinese species described form part of this collection, while the new North American forms were found mostly in a collection made in Louisiana by Mr. H. Edward Hubert, of New Orleans.

Following is a complete list of the species occurring in the collection from China, each species being more particularly noted later on under its proper family:

CHINESE SPIDERS COLLECTED BY N. GIST GEE.

Uloborus, species. Psechrus mimus, new species. Loxosceles rufescens (Dufour). Scytodes nigrolineata (Simon). Scytodes thoracica (Latreille). Gnaphosa suchuana, new species. Selenops bursarius Karsch. Crossopriza lyoni (Blackwall). Pholous opilionoides (Schranck). Theridion tepidariorum C. Koch. Argyrodes bonadea (Karsch.) Argyrodes fur Bösenberg and Strand. Ariannes flagellum (Doleschall). Tetragnatha conformans, new species. Tetragnatha sociella, new species. Tetraquatha, species. Tetraguatha plena, new species. Tetragnatha retinens, new species. Tetragnatha cliens, new species. Eucta chinensis, new species.

Leucauge retracta, new species. Leucauge veterascens, new species. Nesticus alteratus, new species. Nephila clavata L. Koch. Argiope amoena L. Koch. Argiope viabilior, new species. Argiope aequior, new species. Miranda zabonika, new species. Aranea multiplicans, new species. Aranea fratrella, new species. Aranea pia, new species. Aranea quadrata (Clerck). Aranca scricata (Clerck). Chinestela gisti, new species. Gasteracantha nabona, new species. Philodromus amitinus, new species. Agelena labyrinthica (Linnaeus). Tegenaria, species. Coclotes kulianganus, new species. Dolomedes insurgeus, new species.

Dolomedes chinesus, new species.

Lycosa pseudoannulata (Bösenburg and Strand).

Orinocosa oriens, new species.

Pardosa laura (Karsch). Pardosa astrigera L. Koch. Oxyopes sertatus L. Koch. Hyllus mimus, new species.

Family ULOBORIDAE.

ULOBORUS, species.

One immature male in the collection too young for specific identification.

Locality.—China: Soochow.

Family PSECHRIDAE.

PSECHRUS MIMUS, new species.

Carapace yellow, with darker marginal line not passing over pars cephalica and a darker area along upper part of pars cephalica and nearly covering the carapace dorsally. Eyes on black. Sternum light brown, with a large median dark area enclosing a light spot anteriorly. Legs yellow, with broad black annuli excepting on the metatarsi and tarsi, which are not ringed. The abdomen dorsally is silver-colored from a dense coat of hair of that color, the sides dark, either nearly uniform and not spotted, or with a few small and scattered dark spots; the venter yellow excepting for the usual median ventral white line which extends from the anterior end to a spot some distance in front of the cribellum.

This species resembles *P. alticeps* Pocock and differs from other Indo-Asiatic species in having the cephalic region elevated and the eyes prominent. It differs from *P. alticeps* in its somewhat smaller size and in the proportionately shorter legs, the first pair being about 6.4 times as long as the cephalothorax as against 8 times in *alticeps*.

Length, 12 mm.; cephalothorax, 5 mm.; total length of leg I, 32 mm.; tibia and patella I, 11 mm.; tibia and patella IV, 8.5 mm.

Location.—China: Soochow (N. Gist Gee). Three specimens. Type.—Cat. No. 863, U.S.N.M.

Family DICTYNIDAE.

PARAUXIMUS AUSTINENSIS, new species.

Female.—Carapace, sternum, legs, labrum, and endites light yellowish brown. Chelicerae chestnut. Abdomen yellowish gray, without distinct markings.

Lower margin of furrow of chelicera having seven teeth, which decrease in size from the distal one proximad.

¹ Roman numerals used in connection with the length of tibia and patella refer to the pairs of legs, counting from the anterior.

Anterior row of eyes procurved; median eyes much smaller than the laterals, the diameters being to each other as 7:12; median eyes very nearly their radius from the laterals and a little nearer to each other. Posterior row of eyes a little procurved; eyes equidistant, separated from each other by a distance equal to the diameter of a median eye; median eyes a little smaller than the laterals, the diameters being to each other as 5:6. Lateral eyes on each side separated by less than half a radius, the anterior and posterior eyes equal. Clypeus much higher than the diameter of an anterior lateral eye.

Tibia I armed beneath with two pairs of stout spines and with two

spines on anterior surface.

Length, 8 mm.; cephalothorax, 4.2 mm.; tibia and patella I, 4.2 mm.; tibia and patella IV, 4.2 mm.

Locality.—Texas: Austin. R. V. Chamberlin, August, 1909.

Type.—Cat. No. 572, M. C. Z.

This species is referred to *Parauximus* with a little doubt, since the genotype is known only from the male and the present species only from the female, but the reference will probably be found correct. It differs from *Auximus* in its higher clypeus and the more numerous teeth of the margin of the chelicera. It may be noted that the two species described by the author under *Auximus* in ² 1919 were inadvertently listed in this genus instead of in *Amaurobius*, to which they in reality belong.

Family SCYTODIDAE.

LOXOSCELES RUFESCENS (Dufour).

Scytodes rufescens Dufour, Ann. Sci. Pys., 1820, vol. 4, p. 203, pl. 77, fig. 5.

Locality.—China: Soochow (N. Gist Gee). Two specimens.

SCYTODES NIGROLINEATA (Simon).

Dictia nigrolineata Simon, Ann. Soc. Ent. France, 1880, ser. 5, vol. 10, p. 123.

Locality.—China: Kucheng (N. Gist Gee). One male taken in a house at an elevation of 2,000 feet.

SCYTODES THORACICA (Latreille).

Aranea thoracica LATREILLE, Nouv. Dict. d'Hist. Nat., 1884, vol. 24, p. 134.

Locality.—China: Scochow (N. Gist Gee). One female taken in a house.

² Journ. Ent. and Zool.. 1919, p. 3.

Family GNAPHOSIDAE.

GNAPHOSA SUCHUANA, new species.

Plate 1, fig. 1.

Female.—Carapace dusky over a light brown ground, excepting the middle region of pars cephalica, which is clear. Sternum light brown. Legs slightly dusky over brown, without annuli or other markings. Abdomen dusky grey, the middorsal region without distinct marking.

This species is aparently near to G. sinensis Simon, known from the environs of Pekin, but may readily be distinguished by differences in spining of legs as well as by the different form of the epigynum. Metatarsi I and II have each a single pair of stout ventral spines which are between the middle and the base, though there is, in addition, a pair of black stout setae at the distal end which possibly represent reduced terminal spines. The tibiae I and II are armed beneath with two pairs of spines, one pair at distal end, the other a little distad of the middle.

The epigynum is obviously broader than described and figured for sinensis. The median piece broader and shorter.

Length, 8.5 mm.

Locality.—China: Kuliang (N. Gist Gee). Two females taken in low grass among stones.

Type.—Cat. No. 864, U.S.N.M.

Family CLUBIONIDAE.

SELENOPS BURSARIUS Karsch.

Sclenops bursarius Karsch, Verh. Ver. Rheinl., 1879, vol. 36, p. 81, pl. 1, fig. 12.

Locality.—China: Soochow (N. Gist Gee). One immature male taken in a house, October 1.

Family PHOLCIDAE.

CROSSOPRIZA LYONI (Blackwall).

Pholcus lyoni Blackwall, Ann. Mag. Nat. Hist., ser. 3, 1867, vol. 19. p. 392.

Locality.—China: Foochow (N. Gist Gee). One specimen taken August 30.

A species common in India and eastward as far as Burma. It occurs frequently in houses.

PHOLCUS OPILIONOIDES (Schranck).

Aranea opilionoides Schranck, Enum. Ths. Austr., 1783, p. 530.

Locality.—China: Soochow (N. Gist Gee). One specimen taken in a house, September 26.

Family THERIDIIDAE.

THERIDION TEPIDARIORUM C. Koch.

Theridion tepidariorum Koch, Die Arachniden, 1841, vol. 8, p. 75, figs. 647-648.

Locality.—China: Soochow; Kushan, 2,500 feet (N. Gist Gee). Seven specimens.

ARGYRODES BONADEA (Karsch).

Conopistha Bona Dea Karsch, Bull. Ent. Teitachi., 1881, vol. 25, p. 39.

Locality.—China: Soochow (N. Gist Gee). One male.

ARGYRODES FUR Bösenberg and Strand.

Argyrodes fur Bösenberg and Strand, Abh. Senckenb. Naturf. Ges., 1909, vol. 30, p. 133, pl. 2, fig. 226.

Locality.—China: Foochow (N. Gist Gee). Two females, a male, and numerous immature specimens taken on an old tree.

The note states that a pair were usually found together in the same web. A cocoon accompanying the specimens, and from which the young appear to have emerged, is of membranous texture, spherical in form, with a slender attachment thread at one side and an opening at the end of a tubular protrusion at the other.

ARGYRODES BICLAVIS, new species.

Plate 1, figs. 2-5.

Male.—Carapace dusky brown, the sternum darker. Legs in general yellow, the joints of the anterior pairs dusky or blackish at distal ends, particularly in the case of the femora and tibiae of the first pair. Abdomen above with a median longitudinal dusky or blackish stripe which continues down caudal end to spinnerets, broadening caudad; on each side of this stripe shining silver-colored. Sides and venter in front of the silvery area from dorsum dark, brown and blackish.

Cephalothorax with a straight process from clypeus, which is thicker at base than distally, where it is rounded. Just above the clypeal process the head is extended in a process which is slender at base and expands distally into a rounded, knoblike form, this end resting against the upper surface of the end of the clypeal process (pl. 1, figs. 2, 3). This clavate upper process bears the median eyes, of which the anterior are much more widely separated than the posterior, the latter being more than the diameter of an eye apart.

Abdomen with the dorsal line in profile nearly horizontal; the spinnerets born directly below; the caudal end rounded (pl. 1, fig. 4).

Palpus as shown in Plate 1, figure 5.

Length, 2.6 mm.; cephalothorax (including rostrum), 1.4 mm.; tibia and patella I, 2.2 mm.; tibia and patella IV, 0.9 mm.

Locality.--Louisiana: Aimesville. One male.

Type.—Cat. No. 564, M. C. Z.

ARIAMNES FLAGELLUM (Doleschall).

Ariadne flagellum Doleschall, Batavia Nat. Tidjieh., 1857, vol. 13, p. 411.

Locality.—China: Soochow (N. Gist Gee). One specimen.

A species widespread in the Indo-Malaysian region and also occurring in Australia.

Family LINYPHIIDAE.

ANIBONTES, new genus.

Cephalothorax long, narrowed from the middle caudad, not margined. Clypeus exceeding in height the length of the median ocular area. Clypeus and sides of head sloping. Sternum longer than broad, acutely pointed behind. Chelicerae of male long and divaricate, the outer face with a series of teeth much as in species of Erigone. Legs rather short. Tibia and more proximal joints of male palpus without processes.

Genotype.—Anibontes mimus, new species.

This genus differs from *Microneta* particularly in its caudally narrowed cephalothorax, which gives the individual a typically ant-like appearance, and in the armature of the chelicerae of the male.

ANIBONTES MIMUS, new species.

Plate 1, figs. 6, 7; plate 2, fig. 8.

Male.—Cephalothorax conspicuously narrowed from the middle caudad and obviously narrower at the caudal end than at the anterior (pl. 2, fig. 8). Clypeus depressed beneath the eyes and sloping forward.

Anterior row of eyes nearly straight, slightly recurved; median eyes nearer to each other than to the laterals. Posterior row of eyes straight, or very nearly so; median eyes less than their diameter apart, farther from the laterals. Area of median eyes considerably longer than wide; only slightly narrower in front than behind.

Chelicerae in the male distally strongly narrowed or excavated; the claw long; upper margin of furrow with four teeth widely removed from the base of the claw. Proximad of the narrowed distal portion, the chelicera bulges convexly in front and laterally, and along the anterolateral line bears a series of five short spines or teeth, of which the more distal ones are curved (pl. 1, fig. 6).

Carapace and sternum dusky over fulvous, almost black, the labium, endites, and chelicerae also dark. Legs more yellowish and less dusky. Abdomen blackish, with a transverse white band across middle above and laterally, but the band absent or vague ventrally.

Palpus as shown in Plate 1, figure 7.

Length, 2 mm.; cephalothorax, 1 mm.; greatest width of cephalothorax, 6 mm.

Locality.—Louisiana: New Orleans. One male taken in house in June.

Type.—Cat. No. 569, M. C. Z.

BATHYPHANTES ERYTHROIDES, new species.

Plate 2, fig. 9.

Female.—Carapace, sternum, and legs from base to middle of femora light orange. Legs distad of middle of femora black or nearly so. The abdomen reddish, without distinct markings.

Clypeus vertical or very nearly so. Posterior row of eyes a little procurved; median eyes more than their diameter from the laterals, nearer to the latter than to each other. Anterior row of eyes nearly straight, a little procurved; median eyes smaller than the laterals, about their diameter apart and nearly twice as far from the laterals. Lateral eyes prominent.

Epigynum as shown in Plate 2, figure 9.

Length, 2.5 mm.; cephalothorax, 1 mm.; tibia and patella I, 1.45 mm.; tibia and patella IV, 1.3 mm.

Locality.—Louisiana: Talisheek. One female.

Type.—Cat. No. 568, M. C. Z.

GRAPHOMOA, new genus.

Cephalothorax short, narrowed forward, the frons narrow and wholly crossed by the eye-area. Clypeus depressed beneath the anterior eyes, about equal in height to the length of the median eye-area. Anterior row of eyes a little recurved; eyes nearly equal and equidistant, near together. Posterior row of eyes straight or but little procurved; eyes nearly equal and equidistant, typically less than their diameter apart. Lateral eyes nearly contiguous, protruding as in Maso. Chelicerae with both margins dentate, much as, for instance, in species of Gongylidiellum. Sternum broad, cordate, produced and inflexed between posterior coxae nearly as usual in Maso. Legs long and distally slender; the tarsi much shorter than the metatarsi; metatarsi somewhat longer than the tibiae; claws smooth. Abdomen high, not scutate.

Genotype.—Graphomoa theridioides, new species.

GRAPHOMOA THERIDIOIDES, new species.

Plate 2, figs. 10-12.

Female.—Carapace dusky or black, with a light spot on each side of caudal end of pars cephalica but with no other markings. Sternum also nearly black. Endites, labium, and chelicerae less densely dusky. Legs pale, deeply ringed with black; on first and second femora three rings of black, one at each end and one distad of middle; on posterior femora these rings less developed, represented by spots or sometimes not at all on the ends; patellae mostly blackish; tibiae and metatarsi with two black annuli, one at distal end and one at or proximad of middle; tarsi pale only proximally; a dark spot beneath on each coxa.

Posterior row of eyes very slightly procurved; eyes nearly equal and equidistant, less than the diameter of an eye (about four-fifths) apart. Anterior row of eyes a little recurved; equal and equidistant, about their radius apart; protruding forward over clypeus. Area of median eyes longer than wide behind, and wider behind than in front in ratio 7:6. Height of clypeus scarcely less than length of median eye-area. Abdomen above black with white markings; in front of middle four white spots arranged in a quadrangle; below these spots on each side a longitudinal white line, these lateral white lines united across dorsum in front of spinnerets; on each side a second line below the previously mentioned one; venter with a pair of minute white spots caudad of middle.

Chelicerae transversely striate on outer face, and bearing above some minute spinous points; upper margin of furrow with four teeth of which the two proximal ones are much larger than the other two; the lower margin with five small and equal teeth.

Sternum broad, subcordate; caudal end moderately narrowly extended between last coxae and reflexed, truncate at tip much as in *Maso* and some species of *Gonqulidiellum*.

Legs long and slender; metatarsi much longer than the tarsi (pl. 2, fig. 10).

Epigynum represented in Plate 2. figure 12.

Length, 1.8 mm.; cephalothorax, 0.8 mm.; tibia and patella I, 1 mm.; tibia and patella IV, 0.8 mm.

Locality.—Louisiana: Aimesville. One female taken June 25, 1921. Type.—Cat. No. 567, M. C. Z.

CERATICELUS NUBILICEPS, new species.

Plate 2, fig. 16.

Male.—Carapace and sternum fulvous, in general weakly dusky but the anterior portion of the pars cephalica black or nearly so, the clypeus below this pale, like the pars thoracica. Tarsi proximally yellow, the tarsus blackish. Legs yellowish. Abdomen pale yellow excepting the dorsal and ventral plate, which are dark fulvous or

orange colored.

Anterior portion of pars cephalica elevated, evenly rounded, protruding conspicuously forward over lower part of clypeus, the latter high. Posterior row of eyes recurved, the median eyes nearer to the lateral eyes than to each other. Anterior row of eyes a little recurved; median eyes smaller than the laterals and much nearer to each other than to the latter.

Dorsal sclerite of abdomen covering the anterior two-thirds of dorsum. Epigastric sclerite well separated from the dorsal sclerite anteriorly.

Palpus of male as shown in Plate 2, figure 16.

Length, 1.9 mm.; cephalothorax, 0.8 mm.; tibia and patella I, 0.52 mm.; tibia and patella IV, 0.56 mm.

Locality.—Louisiana: New Orleans. One male.

Type.—Cat. No. 567, M.C. Z.

Family ARGIOPIDAE.

TETRAGNATHA CONFORMANS, new species.

Plate 2, figs. 13-15.

Female.—Carapace brown. Sternum darker brown, or more or less dusky, the labium blackish. Legs brown, the joints, especially the tibiae, darkened at extreme distal ends. Abdomen silvery colored above, with the usual median dorsal dark line from which branch and anastamose finer dark lines. Sides and venter of abdomen dark, black or nearly so.

Ocular quadrangle slightly narrower in front than behind.

Mandibles outstanding and diverging, as long as cephalothorax. Claw long and somewhat sinuous, untoothed. Upper margin of furrow bearing a series of seven teeth, of which the most distal, which is well toward middle of length of mandible, is longest, the others decreasing proximad; at distal end a single large black tooth against base of fang. Along ventral margin of furrow at distal end a large, straight, apically black tooth, and proximad of this a series of nine smaller teeth, decreasing in size proximad, the distal ones more widely separated than the others. See further, Plate 2, figure 13.

Abdomen widest in front, narrowing conspicuously caudad, at caudal end projecting a little beyond the spinnerets and at interior end projecting in the usual manner over the cephalothorax.

Male.—Coloration as in the female.

Mandible in side view clavately widening distad and then narrowing again a little at distal end. Toward distal end above with a single large spine which curves distad. Upper margin with a small

tooth at distal end, a larger one a little proximad of this, and these followed proximad at an interval by a still longer tooth, proximad of which is a series of four well-spaced smaller, and paler teeth. The lower margin of furrow with a stout dark tooth at distal end having on ectal side its base a smaller blunt or somewhat nodular tooth; proximad of this a series of 10 or 11 teeth, of which the most proximal are much reduced in size. See further, Plate 2, figure 14.

The palpal organ as shown in Plate 2, figure 15.

Length of female, 9.2 mm.; abdomen, 8 mm.; chelicerae 2.5 mm.; tibia and patella I, 9.4 mm.; tibia and patella IV, 4.5 mm.

Length of male, 7.5 mm.; tibia and patella I, 9.8 mm.

Locality.—China: Kuliang (N. Gist Gee). One male, one female. Type.—Cat No. 865, U.S.N.M.

TETRAGNATHA SOCIELLA, new species.

Plate 3, fig. 17.

Female.—Carapace somewhat darker than in the preceding species, with a dark Y-shaped mark formed by lines along side of pars cephalica, uniting at middle line of pars thoracica. Legs testaceous, joints darkened at distal ends, but with a band at the extreme end lighter. Abdomen with the usual dark lines above. Dorsum on each side limited by a wavy dark line separating off a narrow and correspondingly wavy light stripe on each side, the sides below this dark. Venter paler than sides, but somewhat dusky, with a clearer line on each side.

Area of median eyes narrower in front than behind. The lateral eyes on each side more widely separated from each other than are the

corresponding medians.

The mandibles differ conspicuously from those of conformans and the species hereafter described in having an angular projection, or tooth, on the distal surface of the fang near its base, much as in T. praedonia Koch. On the ventral side at distal end two stout teeth, of which the proximal is the smaller. Proximad of these teeth on lower margin of furrow a tooth with characteristic dark body on distal side of base, from which it appears to arise. Proximad of this tooth seven others decreasing in size proximad. At distal end above a stout dark tooth with a minute one cetad of it. Along dorsal edge of furrow proximad of this a series of six teeth of which the second is the largest, the others decreasing gradually proximad from this. See Plate 3, figure 17.

The epigynum is very similar to that of T. squamata Karsch (pl. 3,

fig. 17).

Length, 10.5 mm.; cephalothorax, 3.1 mm.; chelicerae, 2.9 mm., being proportionately shorter than in the preceding species; tibia and patella I, 10 mm.; tibia and patella IV, 5 mm.

Locality.—China: Kuliang. August 26. (N. Gist Gee). One female.

Type.—Cat. No. 866, U.S.N.M.

TETRAGNATHA PLENA, new species.

Plate 3, fig. 18.

Female.—This species is obviously smaller than any of the others here described. The coloration is of the usual pattern.

Both eye rows clearly recurved. The lateral eyes much closer together than the medians. Area of median eyes scarcely narrower in front than behind.

The species is most readily distinguished by the characters of the chelicerae. These are obviously shorter than the cephalothorax. Lower margin of furrow of chelicera armed over its whole length with a series of about twelve teeth, of which the most proximal are much reduced, and in which series there is no pronounced diastema toward distal end. Dorsal margin of furrow of chelicera with a tooth at distal end followed by a wide diastema proximad of which is a series of seven teeth. No distinct tooth at distal end either above or below.

Epigynum, Plate 3, figure 18.

Length, 6.8 mm.; tibia and patella I, 6 mm.; tibia and patella IV, 3.2 mm.

Locality.—China: Kuliang (N. Gist Gee). One female. Type.—Cat. No. 867, U.S.N.M.

TETRAGNATHA RETINENS, new species.

Plate 3, figs. 19, 20.

Male.—The type unfortunately lacks the abdomen, but the chelicerae and palpal organ furnish means of easy distinction from cliens, to which it seems to be nearest. The dorsal process of the chelicera is less bent forward, more erect, than in the latter species; it is similarly bifid at the tip, but the lower tooth is proportionately smaller. Above the upper margin of the groove two large processes of distinctive form, the more mesal of these presenting a wide swelling at base. Along the upper margin of the furrow are eight smaller black teeth, one of these standing apart near the swelling of the process above mentioned, the other seven forming a series in which the teeth decrease in size caudad. At the distal end beneath a denticle, as in cliens, but mesad and proximad of this, is only one large tooth instead of two. Along the lower margin of the furrow are six small teeth, of which the most proximal stands opposite the second tooth of the dorsal series.

Palpal organ as shown in Plate 3, figure 20.

5596-24-Proc.N.M.vol.63---13

Length of cephalothorax, 2.8 mm.; tibia and patella I, 9 mm. *Locality.*—China: Kuliang (N. Gist Gee). One male. *Type.*—Cat. No. 868, U.S.N.M.

TETRAGNATHA CLIENS, new species.

Plate 3, figs. 21-23.

Female.—Coloration nearly as in T. conformans as described above. Light stripe along upper side of abdomen narrow, line-like. Area of median eyes as wide in front as behind. Lateral eyes of

each side nearer to each other than are the corresponding medians.

The chelicerae about as long as the cephalothorax. Fang of chelicera untoothed either above or below. Lower margin of furrow with a long stout tooth at distal end and directed mesad, and distad of this a denticle directed distad; proximad of the large tooth a series of eleven smaller teeth decreasing in size caudad. On dorsal side a large triangular dark tooth at distal end and beginning near middle a series of six or seven teeth decreasing in size proximad (pl. 3, fig. 21).

Epigynum with median region broadly extended caudad, the sides

convex.

Male.—Dorsal apophysis of chelicera strongly curved distad, the end incised or furcate much as in extensa (Linnaeus) and obtusa C. Koch, the dorsal tooth much the smaller. Just distomesad of base of this process a nearly erect black tooth and at margin of furrow directly mesad of the process a similar tooth with axis in usual direction. Proximad of this second tooth a very stout and long tooth followed by three widely spaced and much smaller teeth, with between the proximal two of these a black denticle and proximad of the most proximal ordinary tooth two other denticles. Just mesad of edge of furrow and at distal end beneath two stout black teeth; and along edge of furrow a series of six small black teeth. See further Plate 3, figure 22.

Palpus as shown in Plate 3, figure 23.

Length of female, 8.8 mm.; tibia and patella. I, 8.4 mm.; tibia and patella. IV, 4.2 mm.

Length of male, 8.5 mm.; chelicerae, 3 mm.; tibia and patella. I

8.8 mm.; tibia and patella. IV, 5 mm.

Locality.—China: Kuliang (N. Gist Gee). One male, one female. Type.—Cat. No. 869, U.S.N.M.

EUCTA CHINENSIS, new species.

Plate 3, fig. 24.

Female.—In size and general appearance resembling E. caudata. Abdomen with the usual network of lines over a silvery ground with

branched middorsal and oblique lateral lines. On the dorsum five or six pairs of black dots forming two longitudinal series, and in addition a series of somewhat larger dots along the median line. These dots, however, are absent on the younger paratypes. Hairs of anterior femora arising from minute black dots.

Pars cephalica proportionately narrower and longer than in caudata. Most readily distinguished by the eyes. The posterior row of eyes much more strongly recurved than in caudata. Lateral eyes on each side much more widely separated than the corresponding medians. Area of median eyes longer than wide and narrower in front than behind. Anterior row of eyes in anterior view a little procurved, the lateral eyes much smaller than the medians. Head carried forward in a rounded tubercle on which the median eyes are situated, this more marked than in caudata.

Abdomen of the usual general form, the cauda forming about onefifth of the total length.

Length of not fully mature female, 9.5 mm.; tibia and patella. I. 5.8 mm.; tibia and patella, IV, 3.8 mm.

Locality.—China: Soochow (N. Gist Gee). One female.

Type.—Cat. No. 870, U.S.N.M.

LEUCAUGE RETRACTA, new species.

Plate 3, figs. 25-26.

Female.—Coloration of the usual general type. A smaller species than the following, veterascens, from which it differs obviously in the form of the abdomen. The abdomen projects much less forward, the caudal end also less protruding, with the caudal slope much more nearly vertical; dorsal line much more nearly horizontal. clavately widening caudad, this feature furnishing an easy means of

Epigynum with the opening proportionately much larger than in the following species. Middle piece of dorsal wall much broader discriminating the species (pl. 3, fig. 25).

Male.—Palpal organ as shown in Plate 3, figure 26.

Length of carapace of female, 3 mm.; width 2 mm. Length of tibia and patella I, 6.2 mm.; of tibia and patella IV, 4 mm.

Length of cephalothorax of male, 2.1 mm.; tibia and patella I, 7.8 mm.; tibia and patella IV, 4 mm.

Locality.—China: Soochow (N. Gist Gee). One male and one female.

Type.—Cat. No. 871, U.S.N.M.

LEUCAUGE VETERASCENS, new species.

Plate 3, fig. 27.

Female.—Carapace light brown, without markings. Mandibles brown of reddish cast. Sternum, labium, and endites dusky, in part black. Legs testaceous or yellow, the principal joints darkened at extreme distal end.

Chelicerae thick, very strongly bulging convexly forward at base in front.

Lateral eyes of each side connate, much farther from the medians than the latter are from each other. Area of median eyes a little longer than wide; narrower in front than behind.

Abdomen very high in front and projecting forward over cephalothorax, rounded; at caudal end projecting caudad of spinnerets in a subconical, distally rounded process. General color relieved as usual with the dull dorsal branching lines of ordinary type. A narrow stripe between epigynum and spinnerets is of brown color, bordered on each side by a bright silver-colored stripe. Sides darkened below, dull, approaching midventral stripe in color. Spinnerets dusky.

Epigynum strongly chitinized, transversely oblong. The dorsal wall of the posterior opening divided by two long furrows as usual, the median piece between exceptionally narrow, a little narrowing

caudad.

Length of cephalothorax, 4 mm.; width, 3 mm. Length of abdomen, 9.5 mm.; width at middle, 4.2 mm.

Locality.—China: Soochow (N. Gist Gee). One female. Type.—Cat. No. 872, U.S.N.M.

NESTICUS ALTERATUS, new species.

Plate 4, fig. 28.

Female.—Carapace and legs yellow. The latter without distinct markings, though the joints are vaguely darker at ends, with trace of paler subapical annulus. Abdomen above with a median longitudinal dark line sending off branches from its sides. On caudal region two transverse blackish bands continuous with vertical bands on the sides. Venter mostly black, with, toward each side, two large inclosed yellow spots which form a very conspicuous character.

Clypeus higher than the ocular area. Anterior median eyes much smaller than the others, close together, the area of median eyes being much narrower in front than behind. Posterior eyes also much nearer to each other than to the laterals. The laterals on each side contiguous. Anterior row of eyes nearly straight, the posterior recurved.

Labium as usual in the genus but a little more convex distally, the border thickened, the plate being transversely depressed proximad of this.

Differing from most other species in having the abdomen subcylindrical rather than globular.

Epigynum very large and convexly bulging, with the opening large (pl. 4, fig. 28).

Length, 4.2 mm.; tibia and patella I, 5.5 m.; tibia and patella IV, 3.8 mm.

Locality.—China: Soochow (N. Gist Gee). One female. Type.—Cat. No. 873, U.S.N.M.

NESTICUS SUGGERENS, new species.

Plate 4, figs. 29-31.

Cephalothorax and appendages yellowish, the sternum and femora of legs in particular often a little dusky. Abdomen grey or bluish grey, with an indistinct median paler mark above.

Carapace broad and low, the pars thoracica rising above the level of the head, the form being much like that of the European N. cel-

lulanus Clerck.

Anterior row of eyes straight; the medians much smaller than the laterals; eyes equidistant, separated by the radius of a median eye, or less. Posterior row of eyes straight; the eyes subequal; median eyes about their diameter apart, nearer to the laterals.

Abdomen of the male subelliptic in outline when viewed from the side, that of the female somewhat higher.

Epigynum (pl. 4, fig. 30).

Palpus of male (pl. 4, fig. 31).

Length of male (type), 2.24 mm.; cephalothorax, 1.12; tibia and patella I, 2 mm.; tibia and patella IV, 1.7 mm.

Locality.—Louisiana: Shrewsbury. February 5, 1921. One male, one female.

Type.—Cat. No. 565, M.C.Z.

NEPHILA CLAVATA L. Koch.

Nephila clavata L. Koch, Verh. zool.-bot. Ges. Wien, 1877, vol. 27, p. 741, pl. 15, fig. 4.

Locality.—China: Soochow (N. Gist Gee). Eight specimens.

ARGIOPE AMOENA L. Koch.

Argiope amoena L. Koch, Verh. zool.-bot. Ges. Wien, 1877, vol. 27, p. 735, pl. 15, fig. 1.

Locality.—China: Soochow. Several males and females, of which the latter are all immature.

Mr. Gee makes the following comments on the coloration in life: "Upper part of abdomen with three transverse lines of black and two broad ones of yellow. In the middle two large red spots back of which a black one and then yellow. The posterior region of abdomen is black with a dark red band in middle. Two rows of yellow dots, four in each. Under surface of abdomen black along middle with three pairs of yellow dots. A large yellow stripe on each side of

the black. Sides brown and black. Red around spinnerets. Sternum yellow in middle, black about the edges. Male brown; tibiae of first two legs black; spots on other joints; markings of body faint."

ARGIOPE VIABILIOR, new species.

Plate 4, fig. 32.

Male.—Carapace pale testaceous, with lighter streaks radiating from the furrow, wholly without darker markings. Sternum clear yellow. Legs also light colored and wholly without annuli, with the very long spines mostly brown but in part black. Tarsus of palpus black from the dense coat of black hairs. Chelicerae small; a black line along anterior face of each continuous with one across clypeus. Dorsum of abdomen pale, more or less silvery, on proximal half with a hastate outline formed by dark hair, and on caudal half with two dark longitudinal and parallel lines. Dorsal pale area limited on each side by a wavy dark line, the side below this dark in numerous spots and streaks. Venter with two black lines converging caudad and united along ventral furrow and in front of spinnerets.

Abdomen long, pointed caudally, with sides but little curved, and subtruncate anteriorly.

Palpus as shown in Plate 4, figure 32.

Length, 8.5 mm.; cephalothorax, 3.6 mm.; width of cephalothorax, 3.2 mm.; tibia and patella I, 6.5 mm.; tibia and patella IV, 5 mm.

Locality.—China: Foochow (N. Gist Gee). One male taken September 30.

Type.—Cat. No. 874, U.S.N.M.

ARGIOPE AEQUIOR, new species.

Plate 4, fig. 33.

Male.—Integument of carapace light testaceous; sides above with a dark band formed by black hairs, a dark line similarly formed extending caudad from each median eye to caudal end of pars cephalica where it nearly meets the one on opposite side; on each side at margin a dark spot above second leg and a smaller one above the third one. Sternum yellow, with a small black spot at border opposite each endite and each leg of the first three pairs. Legs yellow excepting for a black line along ventral surface of femora of first three pairs of legs, this line typically absent, or but partially developed, on femora of fourth legs. Abdomen light dorsally, with a solid brown sagittate mark over anterior half to two-thirds of length, this mark sending out some short lines from each edge. Light dorsal area limited on each side anteriorly by a longitudinal black line, and posteriorly by a series of black lines that run from the pale area obliquely cephaloventrad on the side. Venter marked over entire

length with three longitudinal black lines, the mesal edges of the outer ones of which are irregular and the median one more or less interrupted.

Abdomen nearly as in the preceding species; narrowly truncate

behind, a little rounded in front.

Obviously differing from the preceding species in the form of the tibial apophyses of palpus. The principal apophysis similarly placed but longer and more slender, with the black apical part bent strongly ectocephalad, subuncate. See further Plate 4, figure 33.

Length, 7.5 mm.; cephalothorax, 3 mm.; width of cephalothorax, 2.6 mm.; tibia and patella I, 5 mm.; tibia and patella IV, 3.6 mm.

Locality.—China: Soochow (N. Gist Gee). Two males. Type.—Cat. No. 875, U.S.N.M.

MIRANDA ZABONIKA, new species.

Plate 4, fig. 34.

Female.—Resembling M. aurantia in size but differing conspicuously in coloration, the proportionately longer legs, and the more slender abdomen. Carapace without markings above, a little dusky at sides, pale, clothed densely with a coat of long white hairs. Sternum black along each side, white in a broad stripe along the middle. Femora of the last three pairs of legs yellow, with a black ring at distal end; the femora of first legs black excepting for a yellow annulus a little proximad of distal end. Other joints of all legs yellow, with black annulae, the patella with one annulus about distal half, the tibia with three, the metatarsus similarly with three, of which the median is much longest, and the tarsus with one at distal end. The abdomen narrowly and smoothly subelliptic in outline, more pointed behind. The general color dorsally silvery from a dense coat of hair of that color, crossed by numerous narrow black lines which are farther apart in anterior region than in posterior. The ends of these dark lines connected on each side by a heavier wavy, or zigzag, line below which the sides are darkened by numerous finer dark lines which are mostly somewhat oblique. with a black band between epigynum and spinerets enclosing a few small yellow dots and bordered on each side by a longitudinal yellow band separating it from the dark of the sides.

Epigynum having the same general structure as that of aurantia, the cavity being undivided by a septum, covered beneath by a broad

and long, caudally narrowing, process from the atriolum.

Male.—The male, as usual, very much smaller than the female and differing much in coloration. Carapace pale excepting for a narrow longitudinal brownish stripe at each side of dorsum, this not extending on pars cephalica. Sternum as in the female. Legs without dark annulae excepting a very narrow one at distal end of tibia; but

the femora marked with numerous very small black dots, particularly about bases of spines, these dots more pronounced on femora of the first pair. Abdomen silvery above, with a patch of white spots on each side of dorsum in front, and, over entire length, a few widely separated dark dots about bases of the long setae; sides darkened with small dots and streaks; venter with a silvery, or whitish, stripe on each side, the median region being limited on each side by a black line, the color of the intervening median portion less deep.

Length of female, 19 mm.; cephalothorax, 8 mm.; tibia and patella

I, 11 mm.; tibia and patella IV, 9 mm.

Length of male, 8 mm.; cephalothorax, 3.5 mm.; tibia and patella I, 6.5 mm.; tibia and patella IV, 5 mm.

Locality.—China. Scochow (N. Gist Gee). One male and one female.

Type.—Male, Cat. No. 876, U.S.N.M.

ARANEA MULTIPLICANS, new species.

Plate 5, fig. 35.

Female.—Integument of carapace brown or chestnut; clothed with moderately abundant appressed hairs of light color. Legs with integument similarly chestnut, paler, testaceous to yellow, distally; femor a with a black annulus at distal end and a more or less vague one near middle; patella ringed with dark distally; tibiae of two anterior pairs of legs with three annulae, of which the distal is broadest and deepest, the proximal one narrowest; posterior tibiae lacking the median annulus and having the distal one broader; metatarsi dark at ends. Sternum chocolate colored to black with a median longitudinal vellow line. Markings of abdomen not sharply defined. There is in all a broad black band extending from median line of anterior face across each anterolateral corner and back along the side. Over the posterior part of the side this dark band is characteristically interrupted by transverse pale lines extending across it from the dorsal light area. Dorsum at base with a short clavate black mark in the median line. When in full color there is along each side of the middorsal pale region a series of short black curved marks, there being about six of these on each side. The median pale band typically embraces a vague median longitudinal dark line which is crossed in front of the middle by a number of equally faint, transverse, chevron marks. The venter is covered between furrow and spinnerets with a black area that narrows caudad and incloses toward each lateral edge a characteristic yellow spot.

Abdomen broadly oval, dorsally planate, evenly rounded, and

wholly without angular shoulders or processes.

The epigynum is large, strongly chitinized, and of dark color throughout; the scape is narrowed caudad and presents at distal end a somewhat narrower and much thinner process, which bends up dorsocaudad and is rounded at end.

Length, 12 mm.; cephalothorax, 5 mm.; abdomen, 8 mm.; greatest width of abdomen, 6.4 mm.; tibia and patella I, 7 mm.; tibia and patella IV, 4 mm.

Locality.—China: Soochow (N. Gist Gee). Two females.

Type.—Cat. No. 877, U.S.N.M.

Mr. Gee's note on this species states that it constructs a large web on low bushes. "Spider stays in web but has a nest in leaves."

ARANEA FRATRELLA, new species.

Carapace brown, clothed with gray hair. Legs a little paler, not annulate. Sternum light brown. Abdomen darkened on anterior and lateral faces; a dorsal foliate mark on caudal part.

The pars cephalica is unusually high behind, its sides very steep; dorsal surface broad and complanate, slanting forward. Area of median eyes quadrate, as wide behind as in front. Posterior median eyes obviously larger than the anterior medians.

Abdomen characterized by having an angular median hump that projects forward over carapa to caudal end of pars cephalica; anterolateral corners rounded; subtriangularly narrowed caudad, projecting far beyond spinnerets, which are near middle of ventral surface.

Length, 3.2 mm.

Locality.—China: Kuliang (N. Gist Gee). 2.500 feet. One not fully mature female.

Type.—Cat. No. 878 U.S.N.M.

ARANEA PIA, new species.

Plate 5, fig. 36.

Female.—This large and robust species is, in general, of dark and somber appearance, with markings inconspicuous. Carapace chestnut to mahogany colored, blackish along lower part of sides but with a pale marginal line. Sternum chestnut, blackish toward each side. Legs chestnut, annulate with black. Labium and endites black, pale across tips. Chelicerae black. Abdomen, in general, brown, paler beneath than above. Dorsum with a paler, triangular median mark extending forward from level of humps, and behind these with a foliate mark defined on each side by a strongly wavy black line, the foliate area a darker brown than that of the adjacent parts. Venter with a longitudinal black stripe on each side between lung-book and spinnerets, each stripe interrupted at middle or behind it by a light brown or yellowish spot.

Abdomen large, short and broad; anteriorly high, with a hump at each anterior corner above, the two humps widely separated and the surface between them complanate.

Epigynum large and strongly chitinous, black, limited on each side by a thick vertical plate. Scape arising at anterior edge and then curving ventrad and caudad far behind furrow, the curving basal part thinner and somewhat narrower than the straight distal part.

Anterior median eyes much exceeding the posterior median in size.

Area of median eyes a little wider in front than long.

Length, 25 mm.; cephalothorax, 10.5 mm.; width, 8.8 mm.; tibia and patella I, 13 mm.; tibia and patella III, 11 mm.

Locality.—China: Soochow (N. Gist Gee). Two females.

Type.—Cat. No. 879, U.S.N.M.

ARANEA QUADRATA (Clerck).

Araneus quadratus Clerck, Sv. Spindl., 1757, p. 27. pl. 1, fig. 3.

Locality.—China: Soochow (N. Gist Gee). Four specimens.

ARANEA SERICATA (Clerck).

Araneus scricatus (Clerck), Aran. Svec., 1757, p. 40, pl. 2, fig. 1.

Araneus sclopetarius (Clerck), Aran. Svec., 1757, p. 43, pl. 2, fig. 3.

Locality.—China: Soochow. One female.

CHINESTELA, new genus.

A genus of the group Mangoreae. Resembling the American genera Acacesia and Eustala in having the anterior coxae of the male armed at distal end with a stout, chitinous tooth. Anterior median eyes larger than the posterior medians and much farther apart, the area of median eyes a little oblique, not crinite. Lateral eyes on each side connate. The anterior median eyes much farther from the laterals than from each other. Tibia I of male strongly spined, the spines all long; tibia II, in genotype, curved, not at all swollen, with more numerous, crowded, shorter spines along anteromesal edge and some other longer and stouter spines. Patella of male palpus armed above at distal end with two long spines, the tibia with a stout, chitinous apophysis. Abdomen only moderately elongate, broader anteriorly.

Genotype.—Chinestela gisti, new species.

CHINESTELA GISTI, new species.

Plate 5, fig. 37.

Male.—Dorsal line of carapace straight and horizontal, or nearly so. Carapace dilute brown, with a more deeply colored band along

each side. Sternum black, with a median longitudinal yellow stripe. Legs testaceous to yellow, the femora with darker areas beneath; tibiae annulate at ends on posterior pairs, those of first pair also annulate at middle but annuli weaker. Endites and labium dark,

chestnut, distally paler.

Abdomen broadly rounded in front, narrowing strongly caudad, the end above spinnerets rounded. Clothed with short, pale, appressed hairs and longer, stout, brown setae arranged in transverse series, each series on a transverse ridge, the ridges giving the abdomen the appearance of being annulate. Somewhat paler along middorsal region, with a narrow dark mark enclosed anteriorly, the dorsum and sides elsewhere brown. Venter black between furrow and spinnerets, a paler stripe each side.

Anterior legs much stouter and longer than the posterior. Femora of last three pairs of legs with numerous stout spines and some smaller ones arranged in a close series along ventral surface, the second femur also having a second series of finer, more widely separated spines caudad of the first ones. The principal of these series is represented on the first femur by four much smaller spines, one at proximal end and three in line at the distal, while the caudal series of femur II is represented on I by a series of similar small spines. Tibia I strongly spined, there being a principal series of six long, stout spines along the ventrocephalic surface; a series of four somewhat smaller spines along the midventral line, one of these being at the distal end and more widely separated from the others than the latter are from each other; a series of four spines on caudal surface, and a similar series on anterior face; a series of three spines dorsally, and one of four spines along dorsocaudal line. Tibia II, which is obviously shorter than I, is strongly curved and has along anteroventral edge a close-set series of numerous short but stout, moderately curved spines, there being about seventeen spines in the series with extra ones at intervals caudad of but close to the series; on anterior surface at base and just above principal series five long and much stouter spines, and on side above these but more widely separated, two other stout spines; a series of three spines along anterodorsal edge and two very small, widely separated ones on dorsal surface, one at distal end; one small spine at distal end on anterior side.

Palpus as represented in Plate 5, figure 37.

Total length, 10.5 mm.; cephalothorax, 5.25 mm.; width of cephalothorax, 4.3 mm.; length of abdomen, 6.5 mm.; width of abdomen, 3.6 mm.; tibia and patella I, 7.5 mm.; tibia and patella IV, 6.5 mm.

Locality.—China: Soochow (N. Gist Gee). One male. Type.—Cat. No. 880, U.S.N.M.

GASTERACANTHA NABONA, new species.

Female.—Carapace black. Sternum black, excepting a small red spot at the center. Legs black, the femora at base and subapically with reddish yellow; the patella light proximally; the tibiae, metatarsi and tarsi also light over proximal part. Background of dorsum of abtarsi also light over proximal part. Background of dorsum of abdomen yellow; the spines black; a series of four black spots along anterior border between anterior spines, the median spots being the larger; two spots between posterior lateral spines, and a series of four smaller dots along caudal border; at middle a cuneiform black mark with a median longitudinal black line caudad of it. Venter of abdomen in general black, a series of light dots encircling area of spinnerets and a few light dots scattered over other parts.

Anterior margin of abdomen only moderately convex between the anterior spines. Abdomen narrowed on each side and bearing two spines very close together but not actually in contact, the anterior one a little smaller than the posterior one, and the latter a little smaller than the caudal ones.

Length, 5.6 mm.; width of abdomen between lateral spines, 7 mm. *Locality*.—China: Soochow (N. Gist Gee). One female.

Type.—Cat. No. 881, U.S.N.M.

Mr. Gee's note on this form gives the general color of the abdomen as white in life. "Caught in a round web about 3 feet from ground under the limbs of a tea-oil tree."

Family THOMISIDAE.

PHILODROMUS AMITINUS, new species.

Plate 5, fig. 38.

Female.—Carapace light brown or yellow of a slightly rufous cast, paler on pars cephalica and along middorsal line caudad of it. Legs yellow, more or less weakly dusky. Abdomen above white, with dark basal mark, the latter presenting an angle on each side in front of caudal end; basal mark followed in posterior region by a series of acutely angled chevrons which tend to be broken at middle, all these dorsal marks rather faint. Sides of abdomen above dark, brownish, the lower part of sides and the venter whitish yellow. Epigynum and a spot over each lung-book deep brown or blackish.

Both rows of eyes conspicuously recurved. Eyes of anterior row with medians slightly larger than the laterals; the medians but little farther from each other than from the laterals, being twice their diameter apart and once and a half their diameter from the

laterals. Posterior median eyes nearly of same size as the anterior medians, nearly twice as far from each other as from the laterals.

Femur I dorsally with three rows of spines, three spines in each row, as in *aureolus*; femur IV above with a single basal and one submedian spine and with two at distal end.

Median piece of epigynum very narrow anteriorly, but strongly clavately widening caudad, posteriorly in contact with or a little overlapped by the strongly chitinous edges of the epigynum. See further Plate 5, figure 38.

Length, 5.5 mm.; cephalothorax, 2.2 mm.; tibia and patella I, 32 mm.; tibia and patella IV, 2.8 mm.

Locality.—China: Kuliang (N. Gist Gee). One female taken in grass.

Type.—Cat. No. 882, U.S.N.M.

PHILODROMUS LOUISIANUS, new species.

Plate 5, fig. 39.

Female.—Carapace dusky brown to nearly black on the sides, leaving a broad median light band which is anteriorly wider than the eye-area. The median light band embraces a dark spot on caudal end of pars cephalica, this spot geminate by a median longitudinal light line. Eyes ringed with pale. Clypeus dark, as also the chelicerae. Sternum yellowish. Legs dusky brown excepting the proximal end of femur, which is paler, yellowish, the light color sometimes extending along the ventral surface. Abdomen dark above, with a median pale area on anterior portion, the pale area embracing a dark lanceolate mark; venter greyish, without definite markings.

Posterior row of eyes recurved; median eyes three times as far from each other as from the laterals. Anterior median eyes farther from each other than from the corresponding laterals in ratio 7:5. Area of median eyes much wider behind than in front (5:3), and about of same length as width in front. Anterior row of eyes very nearly straight. Anterior lateral eyes a little larger than the medians, from which they are separated by a distance less than that separating them from the posterior medians (4:5), a little nearer to the posterior medians than to the posterior laterals.

Legs strongly scopulate, the scopulae on the anterior ones extending over tarsus and metatarsus nearly equal to the basal spines of the latter. Three pairs of spines above on femur I.

Cephalothorax a little wider than long (7:6.5).

Epigynum (pl. 5, fig. 39).

Length, 6 mm.; cephalothorax, 3 mm.; tibia and patella I, 4 mm.; tibia and patella IV, 3.5 mm.

Locality.--Louisiana: Mandeville. Three females taken in May, 1921.

Type.—Cat. No. 561, M. C. Z.

Family AGELENIDAE.

AGELENA LABYRINTHICA (Linnaeus).

Aranea labyrinthica Linnaeus, Syst. Nat., ed. 10, 1758, vol. 1, p. 620.

Locality.—China: Soochow (N. Gist Gee). One male and one female taken October 5.

TEGENARIA, species.

Locality.—China: Kuliang. One immature specimen taken August 26.

COELOTES KULIANGANUS, new species.

Plate 5, fig. 40.

Female.—In alcohol, the carapace, sternum, mouth parts, and legs are dark yellow, the carapace dusky about the eyes, but neither carapace nor legs with any definite markings. Carapace glabrous. Sternum with numerous long, erect dark hairs. Mouth parts and legs clothed with similar long bristles, with intervening shorter ones. Ground color of abdomen dusky grey; dorsally a series of black chevron marks which in the anterior half united along middorsal line; the ectal ends of the posterior chevrons bent forwards on the upper part of the sides and then ventrad. Abdomen clothed with numerous long oblique bristles, with shorter, nonappressed ones intervening.

Anterior row of eyes shorter than the posterior by the radius of an eye at each end. Anterior row straight, with the medians obviously smaller than the laterals. Anterior median eyes a little less than their radius apart, closer to the laterals. Anterior laterals nearly their diameter from edge of clypeus. Posterior row of eyes straight; eyes equal in size and equidistant, not fully their diameter apart. Lateral eyes on each side not more than their radius apart.

Labium longer than wide; distal margin mesally concave.

Lower margin of furrow of chelicera armed with two, moderately small, teeth.

Tibia I and metatarsus I each armed beneath with three pairs of spines of which the basal and submedian ones are long and slender, the distal ones short. Femur I with two long slender spines on anterior surface toward distal end, and tibia I with one at distal end. Tibia II with two spines on anterior surface.

Epigynum without trace of lateral marginal teeth. Anterior area depressed, the edges posteriorly more strongly chitinous and bent mesad on each side to edge of middle piece, which is wide.

Length, 7.8 mm.; cephalothorax, 3.9 mm.; tibia and patella I, 4

mm.; tibia and patella IV, 4.5 mm.

Locality.—China: Kuliang (N. Gist Gee). One female. 2.500 feet. August 17.

Type.—Cat. No. 883, U.S.N.M.

Family PISAURIDAE.

DOLOMEDES INSURGENS, new species.

Plate 6, fig. 41.

Male.—The body is marked with the usual broad dorsal dark band over carapace and abdomen, this band limited on each side by a pale stripe clothed mostly with white hairs. The lateral edges of the dorsal band more deeply colored, blackish, while each lateral pale stripe is limited above by a denser, wavy, silvery line. Sternum yellow, with a darker stripe on each side, and several, more or less obscure, dark and radiating lines, or with a continuous black midventral stripe and one toward each lateral border. Legs yellow, not banded. Dark dorsal area of abdomen clothed with chiefly black hairs, but embracing anteriorly a paler sagittate mark and five or six pairs of spots formed by white hair. Sides of abdomen also black just below pale stripe, the color becoming less dense ventrad. Venter darkened in spots and streaks, but with a clear longitudinal line on each side from epigastric furrow to spinnerets.

First row of eyes longer than the second. Anterior median eyes obviously larger than the laterals, their diameter being between one-fourth and one-fifth greater; less than their radius apart, nearer to the laterals. Eyes of second row large; much less than their diameter apart. Area formed by first and second eyes broader than height of

clypeus.

This species in general much resembling the European *D. fimbriatus*, but readily distinguishable from that species and the Japanese *fimbriatoides* in the differing structure of the male palpus. The dorsal tibial apophysis presents a tooth, or spine, on the ectal side of its base as in fimbriatus; but this is much larger, and the principal branch differs in being distally acute instead of truncate or somewhat expanded. The inferior tibial apophysis is short and stout, bent forward distally. A dense patch of spiniform setae at distal end of tibia on ectal side, a corresponding, though less pronounced, patch of similar but smaller setae at distal end of patella. See further, Plate 6, figure 41.

Total length, 12 mm.; cephalothorax, 5.8 mm.; width of cephalothorax, 4.9 mm.; tibia and patella I, 8.5 mm.; tibia and patella IV, 8.2 mm.

Locality.—China: Soochow. Two males and one immature female. Type.—Cat. No. 884 (N. Gist Gee), U.S.N.M.

DOLOMEDES CHINESUS, new species.

Plate 6, fig. 42.

Female.—The integument of carapace black excepting a bright vellow stripe on each side at middle height, a fine light median longitudinal line along middle and down posterior declivity, and a narrow yellow median mark on clypeus. Chelicerae reddish, with a black line down the anterior face of each. Endites yellow ventrally, blackish ectally. Palpi with black markings on femora and a blackish annulus on patella and on tibia. Labium blackish. Sternum yellow, clothed with short whitish hairs and much longer, stiff, dark bristles. Legs with coxae black mottled with yellow; femora with integument solid black beneath and laterally, paler along dorsal surface but there with numerous black dots, clothed densely with brown hair which in the dry specimen cloaks the black of the integument; patellae colored like the femora but other joints light brown of a somewhat reddish cast; spines all black. Abdomen with a broad dorsal band of black, this enclosing a short pale stripe anteriorly; the black dorsal area limited on each side by a yellow stripe corresponding with that on carapace, the side below this stripe dark, but gradually passing below into the yellow or pale brown of the venter; venter with a black median quadrate area caudad of epigynum.

First row of eyes much longer than the second; median eyes with diameter a third longer than that of the laterals, about their radius apart. Eyes of second row large, less than their diameter apart. Area formed by first and second eye-rows much narrower than the clypeus.

All tarsi and metatarsi scopulate; the metatarsi of posterior legs with scopulae less developed proximally.

The epigynum seems most like that of *D. hercules* Bösenberg and Strand, but differs obviously in the form of the median piece, which is relatively larger, completely filling the space between the lateral ridges, with lateral angles projecting into an excavation in latter on each side. See Plate 6, figure 42.

Length, 21 mm.; cephalothorax, 9 mm.; tibia and patella I, 11.5 mm.; tibia and patella IV, 12 mm.

Locality.—China: Soochow (N. Gist Gee). One female.

Type.—Cat. No. 885, U.S.N.M.

Family LYCOSIDAE.

SOSIPPUS MIMUS, new species.

Plate 6, fig. 43.

Female.—Integument of carapace black, in life largely concealed on sides of thoracic division with grey hair; head with a fine light colored median longitudinal line with a similar line on each side diverging caudad from between the eyes, these lines clothed with somewhat orange-colored hair, hair of similar color being also present on sides of head. Sternum brown. Integument of legs brown, not annulate, clothed with finer grey hair and coarser black hair, the grey hair disappearing distally and appearing along dorsal surface of metatarsi in a series of spots, the scopular black as usual. Abdomen clothed above with grey and black hair, the dorsum showing a basal spear-mark furcate behind, each point of the furcation being followed by a series of confluent black spots, those of each side connected by fine chevron lines; lower part of sides showing some brown; venter caudad of epigastric furrow with two black lines that converge caudad and almost meet, thereafter running parallel to each other.

Anterior row of eyes decidedly longer than the second row, procurved, nearly equidistant, the laterals distinctly more than their diameter from the lower margin of the clypeus.

Lower margin of furrow of chelicera with three stout teeth.

Tibia III and IV with a setiform spine in median dorsal line at base, this distally fine, but none at middle or distal end.

Epigynum somewhat resembling that of Sosippus floridanus Simon (pl. 6, fig. 43).

Length, 18 mm.; cephalothorax, 9.2 mm.; tibia and patella I, 7.5 mm.; tibia and patella IV, 9 mm.

Locality.—Louisiana: Mandeville. H. E. Hubert. May 1, 1921. Two females.

Type.—Cat. No. 1012, M. C. Z.

This species might seem to be atypical in possessing only three teeth on the lower margin of the furrow of the chelicera. However, it shares this character with the Costa Rican S. agalenoides; and as the number of teeth varies on the two sides in some individuals of S. floridanus, it is not thought that this character by itself is a reliable generic index.

The field note states that the two specimens of the present species were taken in a funnel web, indicating that the species conforms in habits to the others previously observed.

TEIPPUS, new genus.

Both anterior and posterior spinnerets two-jointed, the second joint of the posterior distinct though relatively rather smaller than in *Sosippus*. Suggesting typical *Sosippus* also in having four teeth on the lower margin of the furrow of chelicera. Readily distinguishable from other genera in having the anterior row of eyes distinctly recurved.

Genotype.—Teippus lamprus, new species.

TEIPPUS LAMPRUS, new species.

Female (immature).—Carapace broad, yellowish brown, clearer yellow in a band on each side above the black marginal line and on each side of head, a darker mark at caudal end of head, the labrum black. Chelicera with a black stripe down the front. Sternum, labium, and endites yellow. Legs yellow, annulate with black. Dorsum of abdomen yellow or orange with a black median basal mark followed by a series of black chevrons. A black band over each anterolateral corner and extending a short distance back on the side. Venter somewhat greyish yellow, clearer yellow at the sides.

Anterior row of eyes a little recurved, the medians farther from each other than from the laterals. Posterior eyes on tubercles pro-

truding laterad. First and second rows in equal length.

Tibiae I and II armed beneath with three pairs of spines, a pair at base and a pair each side of the middle, but none at distal end; a spine on each lateral surface toward distal end. Metatarsi I and II ventrally with a pair of spines at base, a pair at middle, and a single median one at distal end, with a spine ventrolateral in position each side of and a little proximad of the latter. Tibiae III and IV with two median dorsal spines.

Abdomen a little constricted behind middle, shape much as in

Oxyopes.

Length, 4.2 mm.; cephalothorax, 1.83 mm.; tibia and patella I, 2.4 mm.; tibia and patella. IV, 2.29 mm.

Locality.—Louisiana: Fallon. One not fully mature specimen taken February 16, 1921, by H. E. Hubert.

Type.—Cat. No. 1013, M. C. Z.

LYCOSA HUBERTI, new species.

Plate 6, fig. 44.

Female.—Integument of carapace on sides dusky or chocolatebrown, a broad light stripe along middle and constricted at posterior eyes, and a light band on each side above the black margin. Sternum brown, or rather chestnut. Legs lighter brown, without annuli or other markings. Chelicerae and anterior face of head black. Abdomen dark grey or blackish over the sides, the intervening dorsal region with a background of reddish brown and showing a spearmark outlined in black at base and followed by chevron lines extending on each side into the black of the sides; venter brown to brownish yellow, sometimes dusky but without definite markings.

Anterior row of eyes obviously shorter than the second, plainly

procurved, eyes equidistant, the medians much the larger.

Lower margin of furrow of chelicera with three stout teeth.

Tibiae III and IV with two median dorsal spines.

Epigynum with median piece inversely T-shaped, with the cross piece depressed so as to be much dorsad of the level of the portions of the epigynal plate bordering it laterally and anteriorly. See Plate 6, figure 44.

Length, 12 mm.; cephalothorax, 6.2 mm.; tibia and patella I, 5.4

mm.; tibia and patella IV, 6 mm.

Locality.—Louisiana: Talisheek. Six females taken March 4, 1920, by H. E. Hubert.

Type.—Cat. No. 1014, M. C. Z.

Paratypes.—Cat. No. 1015, M. C. Z., and in the collection of H. E. Hubert.

LYCOSA ACOMPA, new species.

Plate 6, fig. 45.

Female.—Carapace chocolate-colored on the sides, with a wide median dorsal stripe of lighter color, the integument showing no distinct lateral light bands. Sternum chocolate-colored. Legs brown, the tibiae and metatarsi, particularly of the posterior pairs, rather vaguely annulate with dark. Abdomen with dorsum grey, showing a dark spear-shaped outline at base with indistinct dark lines and dots behind; sides and venter darker.

Anterior row of eyes slightly procurved, shorter than the second, the median eyes only a little exceeding the laterals in size.

Lower margin of furrow of chelicera with three stout teeth.

Tibiae III and IV with the usual two median dorsal spines, and the spining of anterior tibiae normal.

Septal piece of epigynum inverted T-shaped with the median part strongly widened cephalad (pl. 6, fig. 45).

Length, 8.2 mm.; cephalothorax, 4 mm.; tibia and patella I, 3.33 mm.; tibia and patella IV, 3.58 mm.

Locality.—Louisiana: New Orleans. One female taken in March. H. E. Hubert.

Type.—Cat. No. 1016, M. C. Z.

LYCOSA EPISIMA, new species.

Plate 6, fig. 46.

Female.—Carapace, in alcoholic specimen, dark chocolate-colored or blackish on the sides with a median longitudinal band of reddish yellow nearly as wide as eye area. Sternum yellow at middle, dusky along each side. Legs dusky brown. Abdomen characteristically marked with a median yellow band over its entire length, this band enclosing a faint spear-mark at base. Sides of dorsum and upper parts of sides of abdomen dark, blackish, the dark breaking up into spots on lower part of sides. Venter pale, with dark spots forming a longitudinal line on each side.

Anterior row of eyes shorter than the second, decidedly procurved; median eyes larger than the laterals, the latter once and a half or twice their diameter from the lower margin of clypeus; median eyes nearer to each other than to the laterals.

Lower margin of furrow of chelicera with three teeth, of which the proximal one is smallest.

First two pairs of ventral spines of tibiae I and II long and overlapping. Tibiae III and IV with the usual median dorsal spines.

Epigynum as shown in Plate 6, figure 46.

Length, 8.2 mm.; cephalothorax, 3.4 mm.; tibia and patella I, 3.25 mm.; tibia and patella IV, 3.75 mm.

Locality.—Louisiana: Mandeville. One female taken by H. E. Hubert May 1, 1920.

Type.—Cat. No. 1017, M. C. Z.

LYCOSA SUPRENANS, new species.

Plate 7, fig. 47.

Female.—Carapace with a median longitudinal light stripe that extends forward between the eyes of the third row, but does not quite reach those of the second row, which are upon a black ground; this stripe bisected anteriorly by a median longitudinal black line. A narrow light stripe on each side twice or more its width above the margin. Chelicerae dark, almost mahogany. Sternum dusky, with a median longitudinal pale, and also paler on each side. Legs brown or dusky brown, with some lighter hairs but no distinct annuli. Abdomen dark above, with a median longitudinal light stripe over the entire length, this stripe crossed in its caudal portion with several dark chevron lines and embracing in its anterior portion a hastate outline. Sides of abdomen and lateral portion of venter also dark; venter with a narrow median longitudinal dark band, bordered on each side with a light stripe.

Upper and lower margins of chelicerae each armed with three teeth.

Anterior row of eyes much shorter than the second, distinctly procurved; median eyes less than their radius apart, about an equal distance from the much smaller lateral eyes. Anterior lateral eyes nearly their diameter from lower margin of clypeus, farther from eyes of second row. Eyes of second row less than their diameter apart. Dorsal line of carapace nearly horizontal from eyes to posterior declivity, which is short and very steep.

First two pairs of spines of anterior tibiae long and slenderly tipped, the posterior one of basal pair overlapping the base of the

corresponding spine of the median pair.

Epigynum as shown in Plate 7, figure 47.

Length, 15.5 mm.; cephalothorax, 7 mm.; tibia and patella I, 7.8 mm.; tibia and patella IV, 8 mm.

Locality.—Louisiana: Shrewsbury. Several females.

Type.—Cat. No. 558, M. C. Z.

LYCOSA PSEUDOANNULATA (Bösenberg and Strand).

Tarentula pseudoannulata Bösenberg and Strand, Abh. Senckenb. Naturf. Ges., 1909, vol. 30, p. 319, pl. 8, fig. 106; pl. 13, figs. 323, 326, 334, 338.

Locality.—China: Soochow, Waung Tien, Daung Lake. Ten specimens, males and females.

ORINOCOSA ORIENS, new species.

Plate 7, figs. 48, 49.

Female.—The carapace is dark on the upper part of the sides, but with the dark area crossed by paler lines. A broad middorsal stripe on carapace as wide as the eye area anteriorly, narrowing down the posterior declivity. Area between eyes black. Lower part of sides yellow, the light area broader than the dark one above it, some dark lines from the latter partially crossing it. A deep black marginal line on each side, with a small dark spot above it opposite the interval between each two legs. A median spot between first and second eye rows is clothed with white hair. Legs yellow, the femora with mostly four dark annuli, which are interrupted above and below; tibiae with two longer annuli and the metatarsi with three. Sternum and the venter of abdomen clear yellow. Abdomen yellowish above, with a dusky spear mark at base and several indistinct chevrons behind; some dark partially fusing lines down each side.

Anterior row of eyes only slightly procurved, the clypeus beneath it not receding as it does in the genotype. Anterior median eyes larger than the laterals, almost contiguous with the latter, separated from each other by more than their radius; twice their diameter from lower margin of clypeus. Eyes of second row large, about their

diameter apart, farther from eyes of third row. Ocular area much wider behind than in front (about as 5:4), and much wider than long (5:4), the width in front nearly equaling the length. The cephalothorax 3.12 times as long as the ocular area.

Lower margin of furrow of chelicera armed with three teeth, of which the two proximal ones are closer together; a minute fourth tooth present on one side in the type at the distal end of the series.

Labium rather wide, distally incurved, darker than the endites.

First legs missing. Tibia of second legs armed beneath with three pairs of spines, of which the basal and median are very long, the distal short; with 1–1 spines on anterior face. Patella of legs II to IV, inclusive, with two median spines above, one basal and one distal; the tibiae also with two very long median dorsal spines, one at base and one between middle and distal end.

Epigynum (pl. 7, fig. 48).

Male.—In color, differing from female in having annuli of legs obscure or in part obliterated; also in having the middorsal stripe of carapace densely clothed throughout with fine white hair, the sides clothed with numerous dark hairs, which in dry specimen renders the lower light stripes indistinct. The abdomen above lacks the dark markings, the entire dorsum being clothed densely with white hair and thus contrasting strongly with the darker sides.

Palpal organ as shown in Plate 7, figure 49.

Length of female, 4.2 mm.; tibia and patella IV, 2.8 mm. Male a little smaller, with legs proportionately somewhat longer.

Locality.—China: Kuliang (N. Gist Gee). A male and female taken in low grass among stones.

Type.—Cat. No. 886, U.S.N.M.

The egg sac is subspherical, in present condition light brown, with paler equatorial zone.

PARDOSA LAURA (Karsch).

Lycosa laura Karsch, Verh. Ver. Rheinl., 1879, vol. 36, p. 102, pl. 1, fig. 21.

Locality.—China: Soochow. Twelve specimens, all immature excepting one male.

The annulations of the legs are narrow and numerous in the young specimens, but are obsolete in the adult, as usual.

PARDOSA ASTRIGERA L. Koch.

Pardosa astrigera L. Koch, Jap. Arachn., Verh. zool.-bot. Ges. Wien, 1877, vol. 27, p. 42, pl. 16, figs. 37, 38.

Locality.—China: Soochow (N. Gist Gee). Many specimens. Simon records this species as very common in the environs of Pekin. It is also a common form in Japan.

Family OXYOPIDAE.

OXYOPES SERTATUS L. Koch.

Oxyopes sertatus L. Koch, Verh. zool.-bot. Ges. Wien, 1877, vol. 27, p. 779.

Locality.—China: Soochow (N. Gist Gee). One female.

Family ATTIDAE.

HYLLUS MIMUS, new species.

Plate 7, fig. 50.

Male.—A median light stripe extending over entire length of cephalothorax and abdomen; this stripe is generally clothed with white hair, but with some dark yellow intermixed on posterior part of abdomen, this in form of indistinct chevrons; of bluish cast between eyes; stripe on abdomen widening caudad of middle, midway between which and the caudal end it is produced into a small point or process on each side. Carapace each side of median stripe and over upper part of sides and in a narrow marginal stripe black or nearly so, the lower part of sides covered by a broad light stripe clothed with white hair. Dorsum of abdomen each side of median band and the upper part of sides deep chocolate brown or blackish. Sides of abdomen and lateral and anterior region of venter clothed with white and dark yellow hair intermixed, the median part of venter caudad of furrow black, as in giganteus and various other species, but the sternum pale brown or testaceous. Legs with integument light brown, the anterior ones darker; femur and patella with some longitudinal stripes and marks formed by black hair between white areas, Chelicerae, endites, and labium chestnut colored, the chelicerae in front bearing numerous long white hairs of bluish cast. Numerous long dark bristles from dark area each side in eye region and from dark lateral bands of abdomen as well as from posterior region of median light stripe of the latter.

Eves of usual general arrangement. The posterior eyes much farther apart than from edge of carapace on each side.

Chelicerae of only moderate size, not divergent as in the male of

giganteus, and the fang much smaller, not toothed.

Femur I with dorsal spines 1, 2, 5, the end ones sublateral in position; femur II with dorsal spines 1, 2, 5; femur III with spines 1, 3, 5, one of the 3 being sublateral; femur IV with spines 1, 2, 5. Patella I armed in front with one spine; patellae II, III, and IV armed both in front and behind one spine. Ventral spines of tibia I, 2-2-2, with one on anterior surface; ventral spines of tibia II, 2-2-2, with one on anterior surface and 1-1 on the caudal.

Tibia of palpus with a stout, curved, acute, black-tipped apophysis on ectal side of distal end.

Female.—In what is regarded as the female of this species the median dorsal light stripe extends forward only to the eye area on carapace, and likewise does not reach anterior end of abdomen, being in general less conspicuous; in addition to the process extending from median stripe on each side of posterior part of dorsal band on abdomen, a pair of diverging light lines from anterior end extend out across dark band on each side. Abdomen above more brownish and venter without any dark area.

Length of male, 9 mm.; cephalothorax, 4.5 mm.; tibia and patella I, 5.2 mm.; tibia and patella IV, 4 mm.

Locality.—China: Soochow (N. Gist Gee). Two males and one female.

Type.—Cat. No. 887, U.S.N.M.

DENDRYPHANTES LOUISIANUS, new species.

Plate 7, fig. 51.

Female.—Integument of carapace chestnut, black about the eyes, with that of chelicerae, endites, labium, sternum, and the coxae, trochanters, and femora of anterior legs similarly dark. Carapace in general clothed with more or less iridescent brown scales; between the eyes of the second row a transverse band of white scales, and beginning behind the posterior eyes a median longitudinal band of similar white scales, this band showing a tendency to extend transversely at its anterior end. Clypeus crossed by a band of white scales which extends back on the sides below the eyes. Chelicerae with white scales. Palpi clothed with white hair and white scales. The legs in general have the integument black at the ends of the joints; clothed with mostly whitish scales which do not completely cover the dark integument. Abdomen above in general covered with brown scales; a band of white scales extending around the anterior end and back on each side; anteriorly the dorsum shows two pairs of white spots and behind these on each side three oblique white lines joining the white of the side. Venter white on each side, with a dark median longitudinal stripe which is nearly goblet-shaped with base at spinnerets.

Tibia I with 3-3 ventral spines, of which those under the anterior border occupy but little more than half the length of the joint, while those under the posterior border are more widely separated. Tibia II ventrally with two spines at distal end and two spines in series proximad of the caudal one of these. Metatarsus I and II with 2-2 spines beneath. Leg I much thickened, particularly the femur.

Epigynum as shown in Plate 7, figure 51.

Locality.-Louisiana: Kenner.

Type.—Cat. No. 558, M. C. Z.

PELLENES TEXANUS, new species.

Plate 7, fig. 52.

Male.—Integument of carapace blackish; pars cephalica clothed between eyes with grayish brown, a band of the same continuing over pars cephalica and down the posterior declivity; also a narrow longitudinal band of this same color below eyes on each side and extending caudad, the carapace elsewhere clothed with white and light gray hair. Legs also clothed nearly uniformly with whitish hair, with no distinct banding, but dorsal surface of patella and tibia of first legs clothed with brown. Tarsus of palpus also clothed with brown hair. Venter, sides, and most of abdomen clothed with white appressed hairs; a brown longitudinal stripe along each side of dorsum, the intervening region in type badly rubbed but apparently clothed in life chiefly with white.

Palpal organ as shown in Plate 7, figure 52.

Length, 4 mm.; cephalothorax, 2.28 mm.; tibia and patella I, 1.25 mm.; tibia and patella IV also 1.25 mm.

Locality.—Texas: Austin. One male. R. V. Chamberlin, Aug., 1909.

Type.—Cat. No. 571, M. C. Z.

EXPLANATION OF PLATES.

All drawings made by the author.

PLATE 1.

Gnaphosa suchuana.

Fig. 1. Epigynum.

Argurodes biclavis.

Anterior end of cephalothorax, dorsal view.
 The same, lateral view.
 Abdomen in outline, lateral view.

- 5. Right palpus of male, ectal view.

Anibontes mimus.

- 6. Right chelicera, anterior view, of male.
- 7. Right palpus of male, ectal view.

PLATE 2.

Anibontes mimus.

8. Dorsal view, appendages omitted.

Bathuphantes erythroides.

9. Epigynum.

Graphomoa theridioides.

- 10. First leg, in outline.11. Abdomen in outline, lateral view.
- 12. Epigynum.

Tetragnatha conformans.

- 13. Chelicera of female, upper view.14. Chelicera of male, upper view.
- 15. Right palpus of male, ectal view.

Ceraticelus nubiliceps.

16. Palpus of male, mesoventral view.

PLATE 3.

. Tetragnatha sociella

17. Right chelicera of female, upper view.

Tetragnatha plena.

18. Chelicera of female, mesodorsal view.

Tetragnatha retinens.

- 19. Right chelicera of male, upper view.
- 20. Right palpus of male, ectal view.

Tetragnatha cliens.

Fig. 21. Right chelicera of female, upper view.

22. Left chelicera of male, upper view.

23. Right palpus of male, ectal view.

Eucta chinensis.

24. Anterior end of cephalothorax, dorsal view.

Leucauge retracta.

25. Epigynum.

26. Right palpus of male, subectal view.

Lcucauge veterascens.

27. Epigynum.

PLATE 4.

Nesticus alteratus.

28. Epigynum.

Nesticus suggerens.

29. Abdomen of male, lateral view.

30. Epigynum.

31. Right palpus of male, ectal view.

Argiope viabilior.

32. Right palpus of male, ectal view.

Argiopc aequior.

33. Right palpus of male, ectal view.

Miranda zabonika.

34. Right palpus, ectal view.

PLATE 5.

Aranea multiplicans.

35. Epigynum, ventral view.

Aranea pia.

36. Epigynum, lateral view.

Chinestela gisti.

37. Left palpus of male, ectal view.

Philodromus amitinus.

38. Epigynum.

Philodromus louisianus.

39. Epigynum.

Coelotes kulianganus,

40. Epigynum.

PLATE 6.

Dolomedes insurgens.

41. Right palpus of male, ectal view, with all ordinary setae omitted as usual.

Dolomedes chinesus.

Fig. 42. Epigynum.

Sosippus mimus.

43. Epigynum.

44 ***

Lycosa huberti.

44. Epigynum.

Lycosa acompa.

45. Epigynum.

46. Epigynum.

 $Lycosa\ episima.$

PLATE 7.

Lycosa suprenaus.

47. Epigynum.

Orinocosa oriens.

48. Epigynum.

49. Right palpus of male, ventral view.

Hyllus mimus.

50. Right palpus of male, ectal view.

Dendryphantes louisianus.

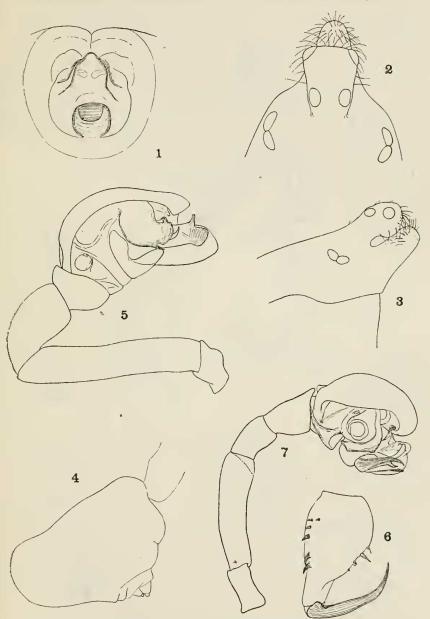
51. Epigynum.

Pellenes texanus.

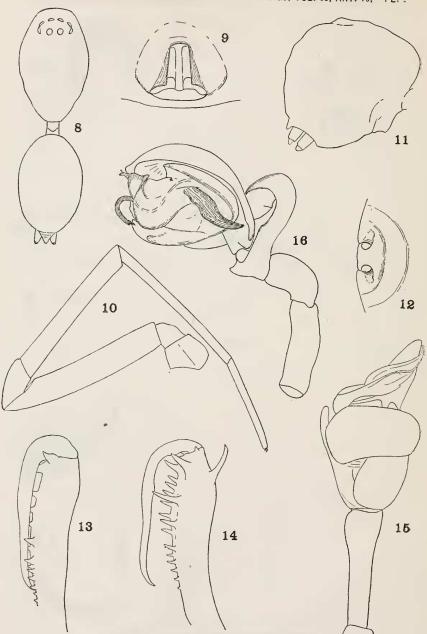
52. Palpus of male, ventral view.

Theridion, species.

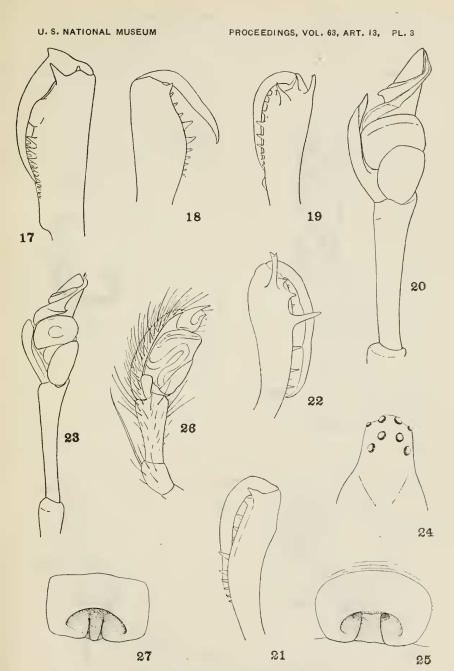
53. Epigynum, lateral view.



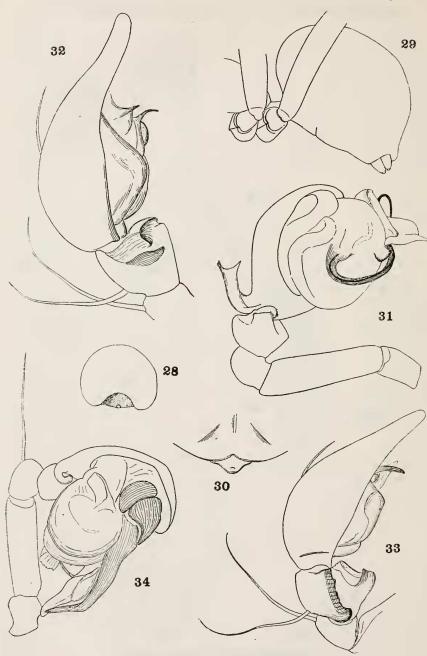
NEW AMERICAN AND CHINESE SPIDERS FOR EXPLANATION OF PLATE SEE PAGE 38



NEW AMERICAN AND CHINESE SPIDERS
FOR EXPLANATION OF PLATE SEE PAGE 36

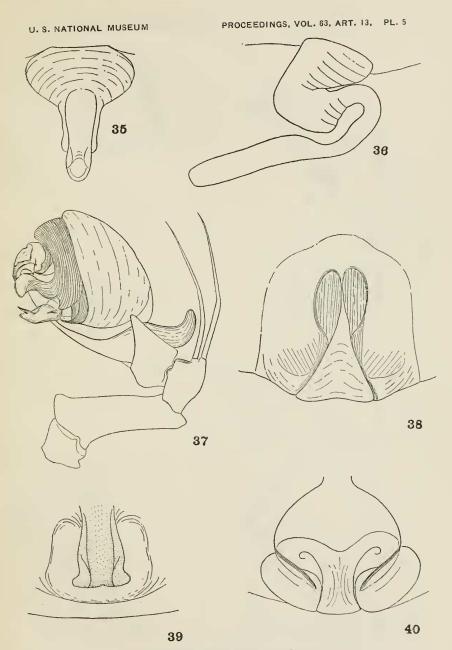


NEW AMERICAN AND CHINESE SPIDERS
FOR EXPLANATION OF FLATE SEE PAGES 38 AND 37



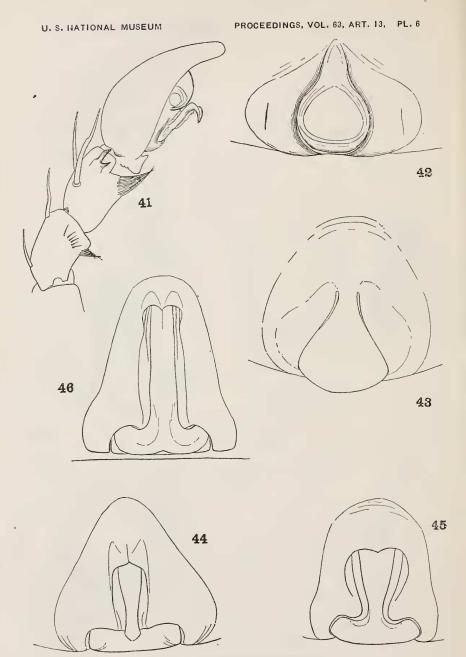
NEW AMERICAN AND CHINESE SPIDERS

FOR EXPLANATION OF PLATE SEE PAGE 37

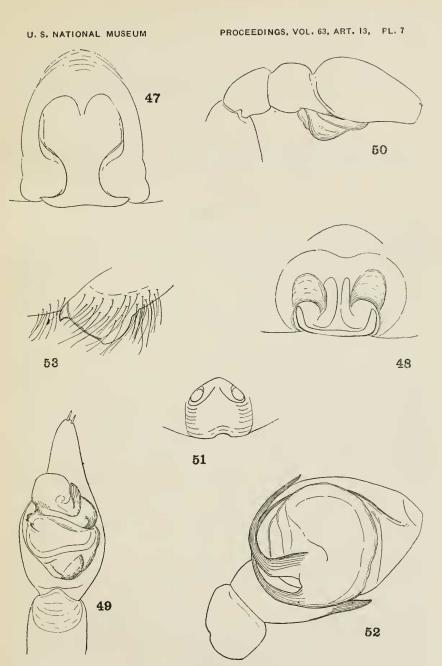


NEW AMERICAN AND CHINESE SPIDERS

For explanation of plate see page 37 5596-24-Proc.N.M.vol.63----15



NEW AMERICAN AND CHINESE SPIDERS
FOR EXPLANATION OF PLATE SEE PAGES 37 AND 38



NEW AMERICAN AND CHINESE SPIDERS

FOR EXPLANATION OF PLATE SEE PAGE 38